

6HF8

High-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage (AC or DC)	6.3 ± 10%	volts
Current at 6.3 volts.	0.75	amp

Direct Interelectrode Capacitances:▲

Triode Unit:

Grid to plate	3.5	μf
Grid to cathode, pentode cathode & grid No.3 & internal shield, and heater.	2.8	μf
Plate to cathode, pentode cathode & grid No.3 & internal shield, and heater.	2.6	μf

Pentode Unit:

Grid No.1 to plate.	0.1 max.	μf
Grid No.1 to cathode & internal shield & grid No.3, grid No.2, and heater.	10	μf
Plate to cathode & internal shield & grid No.3, grid No.2, and heater.	4.2	μf
Triode grid to pentode plate.	0.015 max.	μf

Characteristics, Class A₁ Amplifier:

	Triode Unit	Pentode Unit	
Plate Supply Voltage.	200	45	200 volts
Grid-No.2 Supply Voltage.	—	125	125 volts
Grid-No.1 Voltage	—2	0	— volts
Cathode Resistor.	—	—	68 ohms
Amplification Factor.	70	—	—
Plate Resistance (Approx.).	17500	—	75000 ohms
Transconductance.	4000	—	12500 μmhos
Plate Current	4	40●	25 ma
Grid-No.2 Current	—	15●	7 ma
Grid-No.1 Voltage (Approx.) for plate μ _a = 100.	—	—	—9 volts
Grid-No.1 Voltage (Approx.) for plate μ _a = 20	—6	—	— volts

Mechanical:

Operating Position.	Any
Maximum Overall Length.	2-5/8"
Maximum Seated Length	2-3/8"



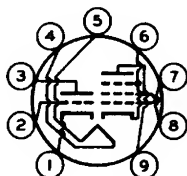
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Length, Base Seat to Bulb Top (Excluding tip) . . . 2" $\pm$ 3/32"
Diameter 0.750" to 0.875"
Dimensional Outline See *General Section*
Bulb T6-1/2
Base Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW 9DX

Pin 1 - Triode
Cathode
Pin 2 - Triode
Grid
Pin 3 - Triode
Plate
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Pentode
Cathode,
Grid No.3,
Internal
Shield
Pin 7 - Pentode
Grid No.1
Pin 8 - Pentode
Grid No.2
Pin 9 - Pentode
Plate

AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

	Triode Unit	Pentode Unit	
PLATE VOLTAGE.	330 max.	330 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE	-	330 max.	volts
GRID-No.2 VOLTAGE.	-	See <i>Grid-No.2 Input</i> <i>Rating Chart</i> at front of Receiving Tube Section	
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value.	0 max.	0 max.	volts
GRID-No.2 INPUT:			
For grid-No.2 voltages up to 165 volts.	-	1.1 max.	watts
For grid-No.2 voltages between 165 and 330 volts.	-	See <i>Grid-No.2 Input</i> <i>Rating Chart</i> at front of Receiving Tube Section	
PLATE DISSIPATION.	1 max.	5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200 max.	200 max.	volts
Heater positive with respect to cathode	200* max.	200* max.	volts

Maximum Circuit Values:

	Triode Unit	Pentode Unit	
Grid-No.1-Circuit Resistance:			
For fixed-bias operation	0.5 max.	0.25 max.	megohm
For cathode-bias operation.	1 max.	1 max.	megohm



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- ▲ Without external shield.
- This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.
- ★ The dc component must not exceed 100 volts.

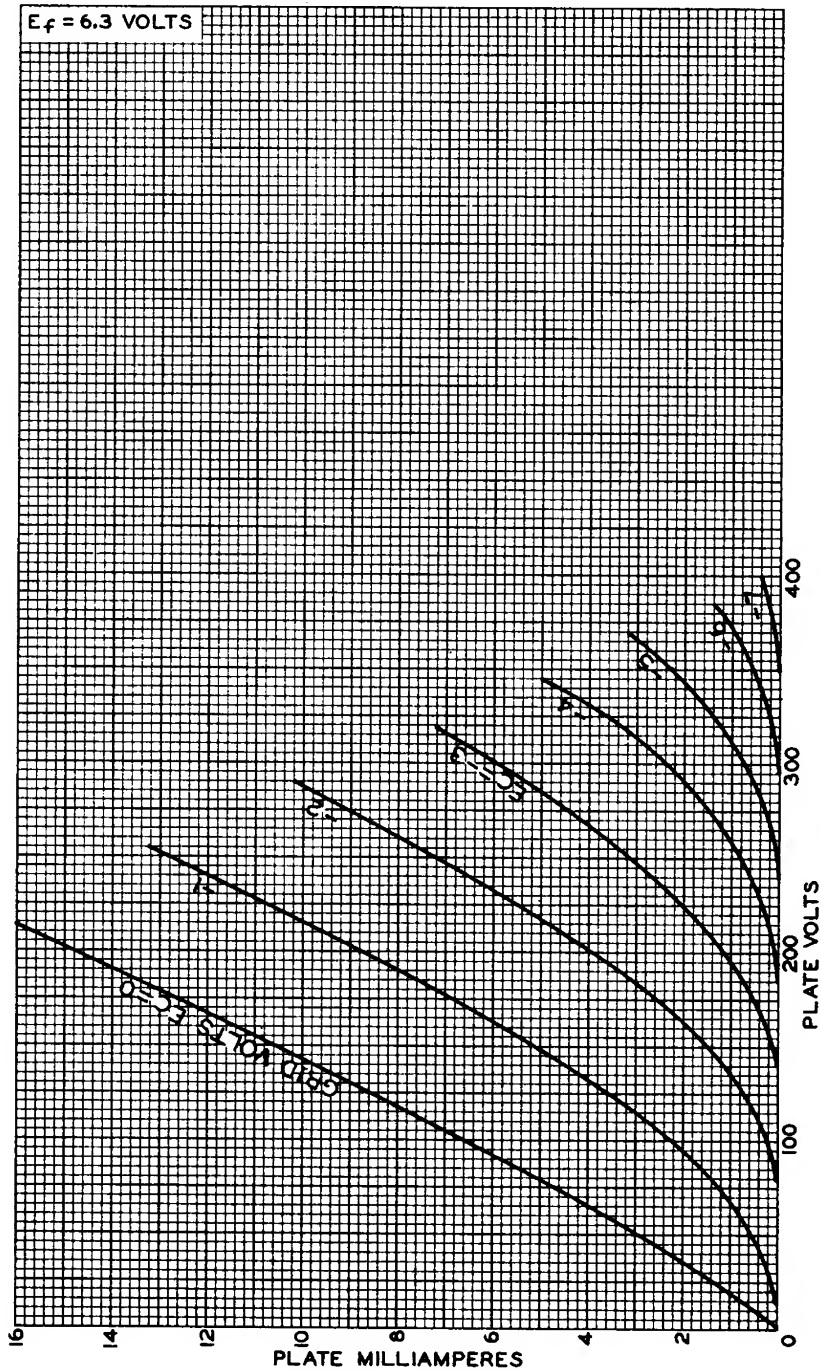


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AVERAGE PLATE CHARACTERISTICS Triode Unit



92CM-8644

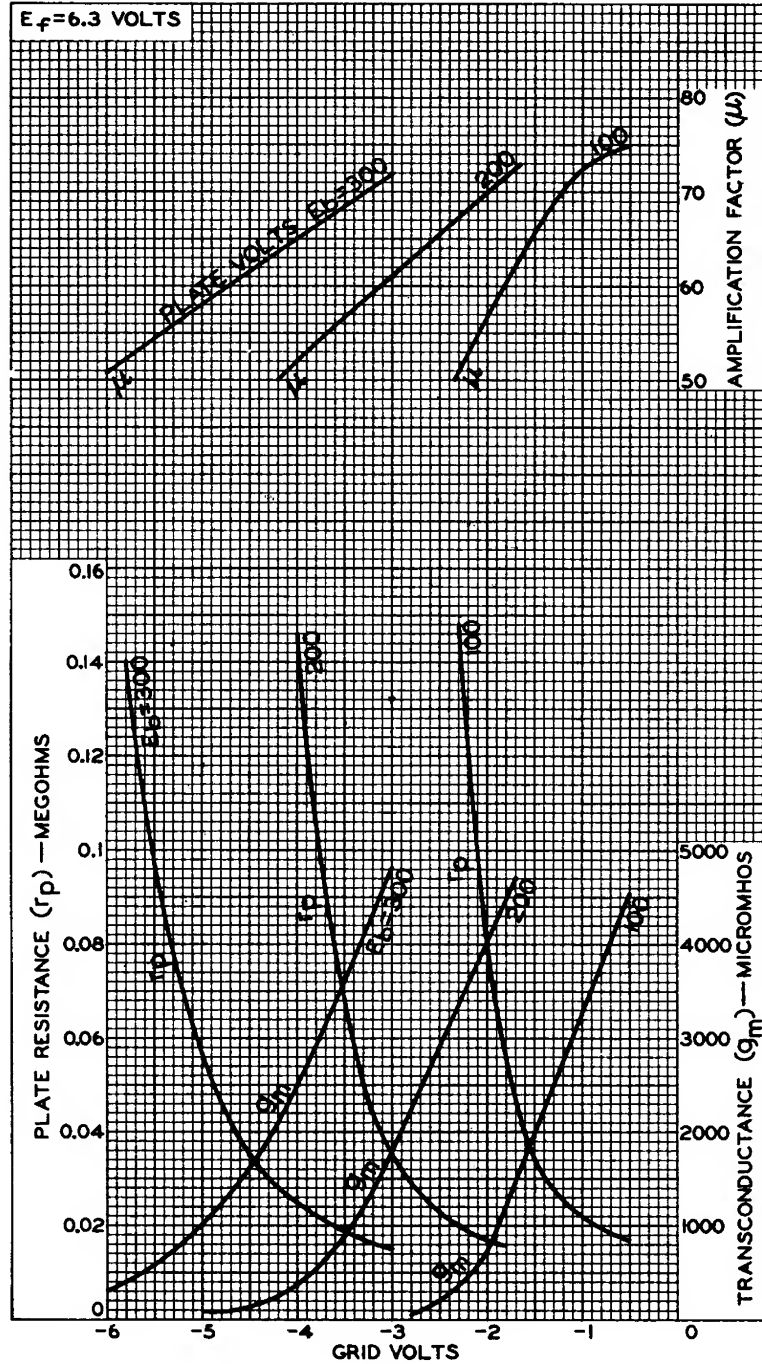
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AVERAGE CHARACTERISTICS Triode Unit



92CM-10874

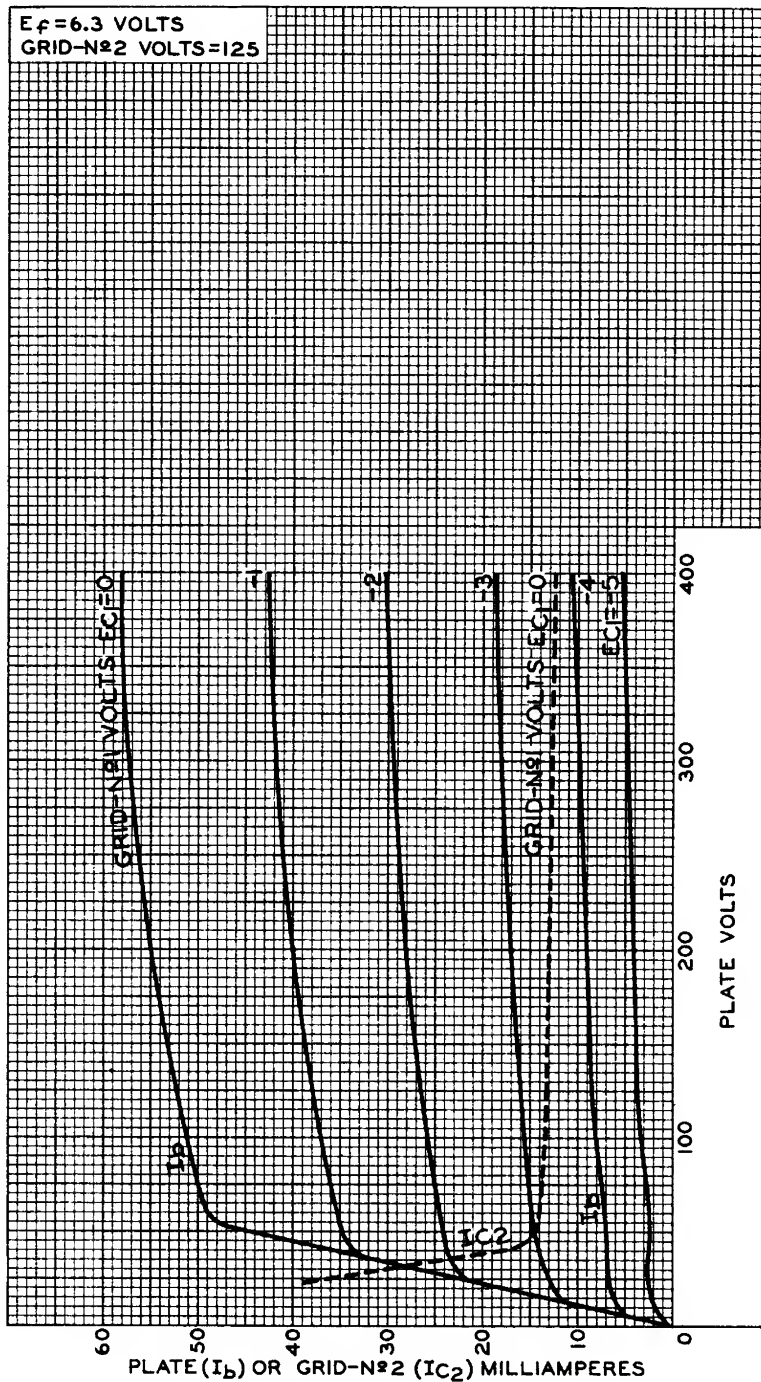


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AVERAGE CHARACTERISTICS Pentode Unit



92CM-9906

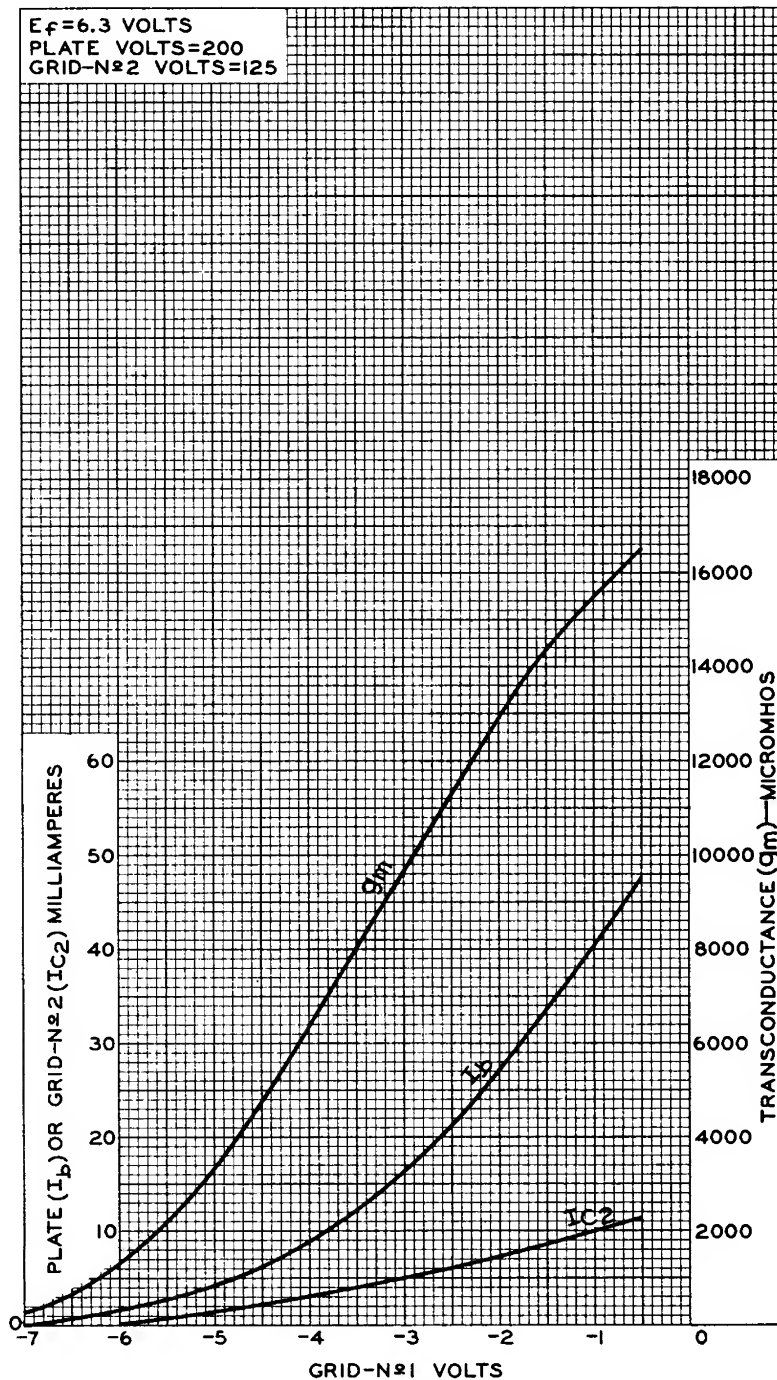
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AVERAGE CHARACTERISTICS Pentode Unit



92CM-9905RI



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